

Attorney's Docket No.: Z-03367/Case 8134

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Application No. : 10/799,939  
Inventor(s) : Charles B. Worrick III et al.  
Filed : March 11, 2004  
Art Unit : 3724  
Examiner : Sean M. Michalski  
Docket No. : Z-03367/Case 8134  
Confirmation No. : 8003  
Customer No. : 27752  
Title : SHAVING RAZOR WITH BUTTON

**APPEAL BRIEF**

Mail Stop Appeal Brief - Patents  
Commissioner for Patents  
P. O. Box 1450  
Alexandria, VA 22313-1450

This Brief is filed pursuant to the appeal from the decision communicated in the Office Action mailed on June 21, 2007.

A timely Notice of Appeal was filed on August 24, 2007.

**REAL PARTY IN INTEREST**

The real party in interest is The Gillette Company of Boston, MA.

**RELATED APPEALS AND INTERFERENCES**

There are no known related appeals, interferences, or judicial proceedings.

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### STATUS OF CLAIMS

Claims 2, 4-6, 11, 14, 16, 17, 22, and 23 are cancelled.

Claims 1, 3, 7-10, 12, 13, 15, 18-21 and 24-26 are pending.

Claims 1, 3, 7-10, 12, 13, 15, 18-21 and 24-26 are rejected.

Claims 1, 3, 7-10, 12, 13, 15, 18-21 and 24-26 are appealed.

A complete copy of the appealed claims is set forth in the Claims Appendix attached herein.

### STATUS OF AMENDMENTS

No amendment was filed.

### SUMMARY OF CLAIMED SUBJECT MATTER

The present claims are directed to a handle for a shaving razor. Claim 1 is directed to a handle casing (170), an interconnect assembly (18) disposed at an end of the handle casing (170) to releasably connect a cartridge (12) to the handle (14) and including a release button (196) having a button substrate (198) and a flexible canopy (200). This is set out on page 18, lines 5-11 of the specification in conjunction with Figs. 1 and 41A. Claim 1 is further directed to a flexible canopy (200) constructed so that a free edge of the flexible canopy (200) contacts a wall (306) formed by the handle casing (170) when the release button (196) is in an unloaded position. This is set out on page 20, lines 15-17 of the specification in conjunction with Fig. 42. The flexible canopy (200) buckles when the button substrate (198) is moved towards the cartridge (12) as a user actuates the release button (196) causing the free edge to move along the wall (306) as shown in Fig. 43 and set out in the specification on page 20, lines 18-21.

The flexible canopy (200) is constructed to recover, after buckling, toward an original, unloaded position. This is set out on page 20, lines 20-21 of the specification in conjunction with Figs. 42 and 43. The contact angle between the outer surface of the canopy and the wall (306) is no greater than about 110 degrees. The contact angle varies along a periphery of the canopy and may vary from about 110 degrees to 50 degrees. The

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maximum contact angle between the outer surface of the canopy and the wall is at a center region of the canopy. This is set out on page 20, lines 22-30 of the specification in conjunction with Figs. 42 and 44.

The shaving razor (10) with a cartridge (12) includes a blade unit (16) and connecting member (18) which is pivotally connected to the blade unit (16) where the blade unit (16) includes a housing (20) carrying one or more shaving blades. This is set forth on page 4, lines 16-23 of the specification in conjunction with Figs. 1 and 2. The shaving razor (10) also has a handle (14) connected to the cartridge (12) including a release button (196) having a button substrate (198) and an elastomeric flexible canopy (200) extending outwardly from the button substrate (198). This is set out on page 19, lines 17-30 and page 20, lines 1-20 of the specification in conjunction with Figs. 42 and 43 and also other figures, such as Figs. 31-33 and 39.

#### GROUND OF REJECTION TO BE REVIEWED ON APPEAL

1. Whether claims 1, 3, 7-10, 13, 15, 18-21, 25 and 26 are unpatentable under 35 U.S.C. §103(a) as being obvious over Apprille et al. (US 5,855,071), hereinafter Apprille, in view of Kirk (US 3,048,673), hereinafter Kirk.
2. Whether claims 12 and 24 are unpatentable under 35 U.S.C. §103(a) as being obvious over Apprille in view of Kirk and further in view of Jones et al. (US 6,898,855), hereinafter Jones.

#### ARGUMENTS

1. Claims 1, 3, 7-10, 13, 15, 18-21, 25 and 26 stand rejected under 35 U.S.C. §103(a) as being obvious over Apprille in view of Kirk.

This rejection is traversed.

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The combination of Apprille and Kirk fails to create a *prima facie* case of obviousness.

Neither Apprille nor Kirk teach a flexible canopy that buckles as required by claim 1. Apprille teaches a rigid button structure which is distinct from the flexible canopy structure of claim 1. Kirk teaches an on/off switching device which is also distinct from the flexible canopy structure of claim 1.

The button structure of Apprille is not flexible, nor a canopy or inclusive of a canopy. The Office Action submits that the lack of flexibility signifies that Apprille does not disclose or suggest a canopy that buckles during actuation and returns to an unbuckled state after actuation. The Office Action therefore cites Kirk as providing this feature.

The switch structure taught by Kirk does not provide for buckling after actuation, but rather a flattening out of the on/off switch (See Kirk, Fig. 3). In contrast, the flexible canopy structure of claim 1 provides for a canopy 200 that buckles inwardly when the button substrate 198 is actuated. In Applicants' Fig. 43, the button is moved along towards the cartridge such that the canopy does not extend outwardly (or flatten out) but rather buckles or folds/curls inward against the wall 306. As such, in contrast to Kirk, the canopy "footprint" or area in Fig. 43 after the button is moved is shown as being smaller than the footprint area in Fig. 42 (original state).

Applicants' specification states the definition of the buckling where the "buckling ... action *maintains* the position of the canopy between the wall and the button substrate..." (specification page 2, lines 7-9, emphasis added) such that "as the release button 196 is actuated, the pusher arms 192 and 194 are pushed forward and the canopy 200 buckles *between* the button substrate 198 and the surface 306. When the button 196 is released, the spring 205 forces the button 196 back to its initial position and the canopy 200 recovers to its unbuckled state." (See specification page 20, lines 15-21, emphasis added). Further characterizing the buckling state, the specification states that "the contact angle  $\phi_1$  between the handle casing 170 and the canopy 200 *at most* about 110 degrees, when the button is at its *rest position* and the canopy is fully

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recovered...the contact angle  $\phi$  varies along the periphery of the canopy 200 from a *maximum* contact angle  $\phi_1$  (e.g., about 110 degrees) at the center of the canopy 200 (Fig. 42) to a *minimum* contact angle  $\phi_2$  (e.g., about 50 degrees) at each side of the canopy (Fig. 44)." (See specification page 20, lines 22-30, emphasis added). Hence, Applicants define the notion of buckling in their specification and clearly depict the buckled state in Fig. 43.

Applicants fail to see any motivation to modify the ejector button of Apprille to conceal an interconnect assembly by providing a switch as taught by Kirk as suggested in the Office Action. Apprille's button is used to push the cartridge out by sliding on a track on a guide surface in the cartridge support structure and does not serve to conceal an interconnect assembly. Furthermore, if Apprille's button were modified to flatten out radially as disclosed by Kirk, the new construction would run counter to Apprille's ability to slide on the track in a given direction.

Accordingly, Applicants contend that independent claim 1 is patentable over Apprille in view of Kirk. Since claims 3, 7-10 and 25 depend from claim 1, they are also patentable over Apprille in view of Kirk for the same reasons as claim 1. Additionally, for reasons discussed above in conjunction with claim 1, similar independent claim 13 is also patentable over Apprille in view of Kirk and hence, claims 15, 18-21 and 26 which depend from claim 13 are also patentable over the cited references.

2. Claims 12 and 24 stand rejected under 35 U.S.C. §103(a) over Apprille in view of Kirk and further in view of Jones (US 6,898,855).

This rejection is traversed.

First, the combination of Apprille, Kirk and Jones fails to create a *prima facie* case of obviousness with respect to claim 1 or with respect to claim 13. Jones fails to provide the flexible canopy structure missing from Apprille and Kirk. As such claim 1 and claim 13 are patentable over the combination. Since claim 12 depends from claim 1, it is patentable over the

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combination for the same reasons as claim 1. Likewise, claim 24 which depends from claim 13 is patentable over the combination for the same reasons as claim 13.

Second, there would be no motivation to alter the buttons of Apprille or Kirk in view of Jones as suggested in the Office Action, to provide a more ergonomic grip. Apprille and Kirk are not providing gripping via their button or on/off switch, respectively. Even assuming arguendo there would be motivation provided by Jones to combine a thermoplastic elastomer on a button, the use of such a material on a canopy is not motivated as it is not an area that would be touched by a user's fingers. One of skill in the art would not arbitrarily provide a thermoplastic elastomer without some underlying motivation to do so.

Accordingly, claims 12 and 24 are patentable over the combination of Apprille, Kirk and Jones.

#### SUMMARY

In view of all of the above, it is respectfully submitted that the claims be allowed on appeal.

Respectfully submitted,

THE GILLETTE COMPANY

By

  
Signature

Date: November 8, 2007  
Customer No. 27752

Joanne N. Pappas  
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Registration No. 40,117

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### CLAIMS APPENDIX

1. A handle for a shaving razor, the handle comprising:  
  
a handle casing; and  
  
an interconnect assembly disposed at an end of the handle casing, said interconnect assembly being configured to releasably connect a cartridge to the handle, and including a release button comprising a button substrate and a flexible canopy, comprising an elastomer, extending outwardly from the button substrate toward the handle casing;  
  
the flexible canopy being constructed so that a free edge of the flexible canopy contacts a wall formed by the handle casing when the release button is in an unloaded position, and the flexible canopy buckles when the button substrate is moved towards the cartridge as a user actuates the release button, causing the free edge to move along the wall.
3. The handle of claim 1, wherein the flexible canopy is constructed to recover, after buckling, toward an original, unloaded position.
7. The handle of claim 1, wherein a contact angle between an outer surface of the canopy and the wall is no greater than about 110 degrees.
8. The handle of claim 1, wherein a contact angle between an outer surface of the canopy and the wall varies along a periphery of the canopy.

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9. The handle of claim 8, wherein the contact angle varies from about 110 degrees to about 50 degrees.

10. The handle of claim 8, wherein a maximum contact angle between the outer surface of the canopy and the wall is at a center region of the canopy.

12. The handle of claim 1, wherein the canopy comprises a thermoplastic elastomer.

13. A shaving razor comprising:

a cartridge comprising a blade unit and connecting member pivotally connected to the blade unit, the blade unit including a housing that carries one or more shaving blades; and

a handle releasably connected to the cartridge, the handle including a release button comprising a button substrate and a flexible canopy, comprising an elastomer, extending outwardly from the button substrate;

the flexible canopy being constructed so that a free edge of the flexible canopy contacts a wall formed by the handle casing when the release button is in an unloaded position, and the flexible canopy buckles when the button substrate is moved towards the cartridge as a user actuates the release button, causing the free edge to move along the wall.

15. The shaving razor of claim 13, wherein the flexible canopy is constructed to recover, after buckling, toward an original, unloaded position.

18. The shaving razor of claim 13, wherein a contact angle between an outer surface of the canopy and the wall is no greater than about 110 degrees.



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19. The shaving razor of claim 13, wherein a contact angle between an outer surface of the canopy and the wall varies along a periphery of the canopy.
20. The shaving razor of claim 19, wherein the contact angle varies from about 110 degrees to about 50 degrees.
21. The shaving razor of claim 19, wherein a maximum contact angle between the outer surface of the canopy and the wall is at a center region of the canopy.
24. The shaving razor of claim 13, wherein the canopy comprises a thermoplastic elastomer.
25. The handle of claim 1 wherein the canopy has a thickness between about 0.3 mm and about 0.6 mm.
26. The shaving razor of claim 13 wherein the canopy has a thickness between about 0.3 mm and about 0.6 mm.

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## EVIDENCE APPENDIX

None

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## RELATED PROCEEDINGS APPENDIX

None